

19-7548



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

D4881-1

Job Sheet 187314



Part No: D4881-1

Job Qty: 3 ea

Part Name: Strut



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/30/18

Job Tracking No:

Created By: Jason Leroux

Due Date: 12/8/18

Description:

Type: Stock

Note: DWG REV C SHEET 5 IPP REV:A 13.12.17 NEW ISSUE DD VERF:JLM

Ship Via:

## Bill of Materials

## Job Routing

| Op No | Operation          | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off |
|-------|--------------------|-------|------------|----------|-----------|---------|-----------------------|-----------|----------|
|       |                    |       |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time |          |
| 90    | Start up Operation | 3 Ea  | 12/8/18    | 12/8/18  | 0.00      | 0.00    | Start Up Machining-3  |           |          |
| 100   | CNC Lathe          | 3 pcs | 12/8/18    | 12/8/18  | 0.00      | 4.71    | Doosan                |           |          |
| 110   | QC                 | 3 pcs | 12/8/18    | 12/8/18  | 0.00      | 0.00    | QC2 Machining-3       |           |          |
| 120   | QC                 | 3 pcs | 12/8/18    | 12/8/18  | 0.00      | 0.00    | QC8 Machining-3       |           |          |
| 130   | Outsource          | 3 pcs | 12/8/18    | 12/8/18  |           |         | SKY002-VC             | 6         |          |
| 140   | Packaging          | 3 pcs | 12/8/18    | 12/8/18  | 0.00      | 0.00    | Packaging2            |           |          |
| 150   | QC                 | 3 pcs | 12/8/18    | 12/8/18  | 0.00      | 0.00    | QC5                   |           |          |
| 160   | Packaging          | 3 pcs | 12/8/18    | 12/8/18  | 0.00      | 0.00    | Packaging3-2          |           |          |
| 170   | QC21-SA            | 3 Ea  | 12/8/18    | 12/8/18  | 0.00      | 0.00    | QC21                  |           |          |

Part Op 100 - 1- Turn as per Folio FB246 Rev: \_\_\_\_\_ & Dwg D4878 Rev: \_\_\_\_\_ 2- Deburr  
Descriptions: 110 - QC2- Inspect parts off machine FAI/FAIB

120 - QC8- Inspect parts - second check

130 - Outsource process - NDT per QSI038 4.1 ISSUE P/O : 041952

C OF C IS REQUIRED

140 - Receive &amp; Inspect for Damage &amp; Mat'l Certs

150 - QC5- Inspect part completeness to step on W/O

160 - Identify as per dwg &amp; Stock Location:

170 - QC21- Final Inspection - Work Order Release

21  
9-00

DEC 19 2018

## Job BOM

| Part / Item       | Component Name                | Quantity            | Operation             | Container |
|-------------------|-------------------------------|---------------------|-----------------------|-----------|
| M17-4-H900-R0.750 | 17-4 SS H900 Round Bar 0.750" | 2.2290 ft (.743 ea) | 90-Start up Operation | 5099997   |

## Job Allocations

| Operation             | Component Part    | Required | Inventory | Allocated |
|-----------------------|-------------------|----------|-----------|-----------|
| 90-Start up Operation | M17-4-H900-R0.750 | 2        | 3         | 0         |

## Part Specifications

Specifications could not be found.

Plex 11/30/18 9:55 AM dart.leroux.jason





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# **PURCHASE ORDER** **PO041952**

**Supplier:** SKY002-VC  
Skyservice  
6120 Midfield Road  
Mississauga  
ON  
L5P 1B1 Canada  
Phone: 905-678-5636  
Fax: 905-678-5841

**PO No:** PO041952  
**PO Date:** 12/5/18  
**Due Date:** 12/10/18  
**Purchase Order**  
**Revision:**  
**Revision Date:**  
**Ship-To Contact:** Tsimiklis, Chrisoula  
**Phone:**

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground  
**Pymt Terms:** Net 30  
**Freight Terms:**  
**Special Comments:**

| Items               |        |         |                                                                                                                       |        |         |          |                |                   |         |                  |                 |
|---------------------|--------|---------|-----------------------------------------------------------------------------------------------------------------------|--------|---------|----------|----------------|-------------------|---------|------------------|-----------------|
| Line Item           | Job    | Part    | Description                                                                                                           | Status | Account | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price  |
| 1                   | 187314 | D4881-1 | Strut<br>: Various STC's<br>Outsource process - NDT per<br>QSI038 4.1<br>ISSUE P/O<br>C O F C IS<br>REQUIRED          | Firmed | -       | 12/10/18 | 3 pcs          | 0 pcs             | 3 pcs   | \$22.50/pcs      | \$67.50         |
| 2                   | 185408 | D4885-1 | End Fitting<br>: Various STC's<br>Issue<br>P/O:<br>LPI Per ASTM 1417 LEVEL 2<br>Certificate of conformaty is required | Firmed | -       | 12/10/18 | 6 pcs          | 0 pcs             | 6 pcs   | \$22.50/pcs      | \$135.00        |
| <b>Grand Total:</b> |        |         |                                                                                                                       |        |         |          |                |                   |         |                  | <b>\$202.50</b> |

CL



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## PURCHASE ORDER PO041952

### Order Notes

#### Procurement Quality Clauses

A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)

A022 Apical Processing  
A024 process certifications  
A026 certification of material conformance

A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 12/5/18 11:24 AM dart.tsimiklis.chrisoula

**skyservice****Work Order Traveler**

Sky Service F.B.O. Inc.

10105 Ryan Avenue, Dorval, Quebec, H9P 1A2

TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 385

|                       |                                      |                      |                            |
|-----------------------|--------------------------------------|----------------------|----------------------------|
| <b>WO #:</b> MWO38525 | <b>Customer:</b> Dart Aerospace Ltd. | <b>Dept:</b> NDT YUL | <b>Reference:</b> PO041952 |
| <b>Descr:</b>         | <b>PN:</b>                           | <b>S/N:</b>          | <b>Qty:</b> 1              |
| <b>Make:</b>          | <b>Model:</b>                        | <b>Reg:</b>          | <b>A/C S/N:</b>            |
| <b>TSN:</b>           | <b>CSN:</b>                          | <b>TSO:</b>          |                            |

|                          |                    |
|--------------------------|--------------------|
| <b>Task:</b> UNSCHEDULED | <b>Sequence:</b> 1 |
|--------------------------|--------------------|

**Work Required:**

CARRY OUT NDT ON NINE PARTS AS PER PO: PO041952

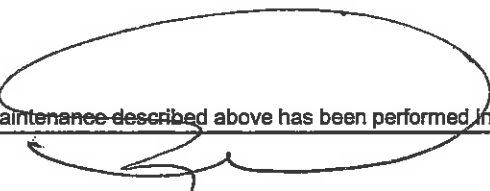
3 STRUTS , P/N# D4881-1 , J/S# 187314

6 END FITTING , P/N# D4885-1 , J/S# 185408

|                                                                                                                                                         |              |                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Action Taken:</b>                                                                                                                                    | <b>Date:</b> | <b>Initial/Stamp:</b>                                                                                                                                                      |
| LPI C/O IAW ASTM E-1417M-16<br><br>NO CRACK FOUND<br><br>PEN ZL-37, MPO13139, CLEANER SKC-S MPO15030, EMU. MPO15896,<br>DEV. MPO15030, UV LIGHT M-20142 | DEC 10 2018  | <br> |

| Description | Location | P/N | Qty | Batch | S/N Off | S/N On |
|-------------|----------|-----|-----|-------|---------|--------|
|             |          |     |     |       |         |        |
|             |          |     |     |       |         |        |
|             |          |     |     |       |         |        |
|             |          |     |     |       |         |        |
|             |          |     |     |       |         |        |
|             |          |     |     |       |         |        |

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

|                                                                                     |                                                                                       |              |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------|
| <b>Signature:</b>                                                                   | <b>ACA/SCA Stamp</b>                                                                  | <b>Date:</b> |
|  |  | DEC 10 2018  |
| <b>Name:</b> RAFIK MELIKYAN                                                         |                                                                                       |              |

DQA:

Date:

18/11/30



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

ZR

Date:

Oct 24/19

Work Order update only ☐

|                                                           |                                                         |                                                 |                                                            |                                                                                  |                                               |                                                                                                                      |  |  |  |
|-----------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--|--|--|
| Work Order: <u>187314</u>                                 |                                                         | <b>DISPOSITION</b>                              |                                                            | <b>AGAINST DEPARTMENT/PROCESS</b>                                                |                                               |                                                                                                                      |  |  |  |
| Part No. <u>D4881-1</u>                                   |                                                         | Rework <input type="checkbox"/>                 | Skid-tube <input type="checkbox"/>                         | Cross tube <input type="checkbox"/>                                              | Water Jet <input type="checkbox"/>            | Engineering <input type="checkbox"/>                                                                                 |  |  |  |
| NCR No. <u>19-7543</u>                                    |                                                         | Scrap <input checked="" type="checkbox"/>       | Machining <input checked="" type="checkbox"/>              | Small Fab <input type="checkbox"/>                                               | Prod. Eng. Coord. <input type="checkbox"/>    | Quality <input type="checkbox"/>                                                                                     |  |  |  |
|                                                           |                                                         | Use-as-is <input type="checkbox"/>              | Thermoforming <input type="checkbox"/>                     | Finishing <input type="checkbox"/>                                               | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>                                                                                       |  |  |  |
|                                                           |                                                         | Suspected Unapproved <input type="checkbox"/>   | Large Fab <input type="checkbox"/>                         | Composite <input type="checkbox"/>                                               | Supplier <input type="checkbox"/>             |                                                                                                                      |  |  |  |
| Date : <u>2018-11-18</u>                                  |                                                         | Step #:                                         |                                                            | QTY Effective : <u>3</u>                                                         |                                               | MRB (QSI042) Approval                                                                                                |  |  |  |
| Description Work Order Deviation                          |                                                         |                                                 |                                                            | Disposition                                                                      |                                               | DAS 55 9-89 18 Nov 2018<br>Completed By <u>De</u><br>Lead hand / Supervisor Approval Verification<br><u>18/11/30</u> |  |  |  |
| Scrap because The part have a mark in the inside diameter |                                                         |                                                 |                                                            | SCRAP and replace<br><br>1x Scrap <del>8x</del><br><br>M17-4-H900-R0.750 5099997 |                                               | QC / QA Coordinator Approval<br>DAS 55 9-89 18 Nov 2018                                                              |  |  |  |
| <b>Root Cause</b>                                         |                                                         | <b>FAULT CATEGORY</b>                           |                                                            |                                                                                  |                                               |                                                                                                                      |  |  |  |
| Environment <input type="checkbox"/>                      | No Re-verification <input type="checkbox"/>             | Pressure/Forced <input type="checkbox"/>        | Temperature/Cure <input type="checkbox"/>                  | Power Loss/Surge <input type="checkbox"/>                                        | Positioned Wrong <input type="checkbox"/>     |                                                                                                                      |  |  |  |
| Design <input type="checkbox"/>                           | Operator <input type="checkbox"/>                       | Bending <input type="checkbox"/>                | Set-up <input type="checkbox"/>                            | Folio/Program <input type="checkbox"/>                                           | Outside Dimensions <input type="checkbox"/>   |                                                                                                                      |  |  |  |
| Doc/Data <input type="checkbox"/>                         | Offset/Setup <input type="checkbox"/>                   | Centre Not Concentric <input type="checkbox"/>  | BOM/Route <input type="checkbox"/>                         | Grain <input type="checkbox"/>                                                   | Over/Under tolerance <input type="checkbox"/> |                                                                                                                      |  |  |  |
| Equip/Tooling <input type="checkbox"/>                    | Supplier <input type="checkbox"/>                       | Cracks <input type="checkbox"/>                 | Broken/Damage/Defect <input type="checkbox"/>              | Weld <input type="checkbox"/>                                                    | Part Incorrect <input type="checkbox"/>       |                                                                                                                      |  |  |  |
| Handling/Pre <input type="checkbox"/>                     | Training <input type="checkbox"/>                       | Crimp/Kink/Ripple/Wave <input type="checkbox"/> | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/>                                      | Part Lost/Missing <input type="checkbox"/>    |                                                                                                                      |  |  |  |
| Material <input type="checkbox"/>                         | Use for Testing <input type="checkbox"/>                | Cuffs <input type="checkbox"/>                  | Contamination <input type="checkbox"/>                     | Out of Sequence <input type="checkbox"/>                                         | Part Moved <input type="checkbox"/>           |                                                                                                                      |  |  |  |
| Internal Transport <input type="checkbox"/>               | Poor Information <input type="checkbox"/>               | Crushing <input type="checkbox"/>               | Countersink <input type="checkbox"/>                       | Off-set <input type="checkbox"/>                                                 | Drawing <input type="checkbox"/>              |                                                                                                                      |  |  |  |
| Tribal Knowledge <input type="checkbox"/>                 | Rushing <input type="checkbox"/>                        | Heat Treat <input type="checkbox"/>             | Cut Too Short <input type="checkbox"/>                     | Mislabeled <input type="checkbox"/>                                              | Finish <input type="checkbox"/>               |                                                                                                                      |  |  |  |
| LOA <input type="checkbox"/>                              | Product Improvement <input type="checkbox"/>            | Wave/Twist in Tube <input type="checkbox"/>     | Instructions Incomplete/Unclear <input type="checkbox"/>   | Fit/Function <input type="checkbox"/>                                            | Misread <input type="checkbox"/>              |                                                                                                                      |  |  |  |
| Substation <input type="checkbox"/>                       | Process Improvement <input checked="" type="checkbox"/> | Marks/Chatter <input type="checkbox"/>          | Drill Holes <input checked="" type="checkbox"/>            | Misaligned/off center <input type="checkbox"/>                                   | Turning Sequence <input type="checkbox"/>     |                                                                                                                      |  |  |  |
| Past Expiry Date <input type="checkbox"/>                 | Manufacturing Process <input type="checkbox"/>          |                                                 |                                                            |                                                                                  |                                               |                                                                                                                      |  |  |  |
| Misidentified <input type="checkbox"/>                    | Past Due <input type="checkbox"/>                       | OTHER :                                         |                                                            |                                                                                  |                                               |                                                                                                                      |  |  |  |